

SAFETY DATA SHEET

Date: 6 February, 2023

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: OTS-Probes (Synthetic Oligo DNA Mixture)
Manufacturing company: Quantdetect, Inc.
Tokyo Sankei Bldg. 27L 1-7-2 Chiyoda, Tokyo 100-0004, Japan
Telephone: 03(3242)3146
Emergency contact: 03(3242)3146

2. HAZARDS IDENTIFICATION

GHS classification: Not classified
Following label elements deleted
Other hazards than GHS classification: None
Important symptoms: None
Summary of anticipated emergency: None
Country / Region Information: None

3. COMPOSITION / INFORMATION ON INGREDIENTS

Substance / mixture: Mixture
Components: Oligonucleotides (mixture of unmodified & modified oligo DNA)
CAS No.: None
Hazardous ingredients: None

4. FIRST-AID MEASURES

Eye contact: Rinse cautiously eyes with water more than 15 minutes. Rinse thoroughly under the eyelids.
If eye irritation such as itching or inflammation occurs, get medical advice/attention.

Skin contact: Gently wash with plenty of soap and water.
If skin irritation such as itching or inflammation occurs, get medical advice/attention.

Inhalation: None

Ingestion: Rinse thoroughly with water. If feeling unwell, medical advice/attention.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Water, etc.

Extinguishing method: No method specified.

6. ACCIDENTAL RELEASE MEASURES

Personal precaution: None

Protective equipment

and emergency procedures: None

Environmental precautions: None

Methods for Recovery, Neutralization

and Containment: None

7. HANDLING AND STORAGE

Handling:

Do not handle containers roughly, such as tipping over, dropping, applying shocks, or dragging.

Close container after use.

Storage:

Store in a cool, dark place below -20° C.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Appropriate protective equipment: Wear protective glasses (goggles), protective gloves, protective clothing, etc. as necessary

Occupational exposure limits: No data available

Control concentration: No data available

Permissible concentration: No data available

Facility measures: No data available

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance of substance (physical state, shape, color, etc.):

Solution: Colored and transparent liquid,

Dry: Colored paste-like solid

(Refer to Appendix 1 for color)

Odour: No data available

pH: No data available

Melting point/freezing point: No data available

oiling point/range: No data available

Flash point: No data available

Upper and lower flammability or explosive limits:	No data available
Vapor pressure:	No data available
Vapor density:	No data available
Specific Gravity (Relative Density):	No data available
Solubility:	No data available
n-octanol/water partition coefficient:	No data available
Autoignition temperature:	No data available
Decomposition temperature:	No data available
Odor threshold:	No data available
Evaporation rate:	No data available

10. STABILITY AND REACTIVITY

Stability and Reactivity:	Stable under proper conditions.
Conditions to avoid:	Sunlight and high temperature
Incompatible materials:	No data available
Hazardous decomposition products:	No data available

11. TOXICOLOGICAL INFORMATION (human cases, including epidemiological information)

*Refer to appendix 2 for toxicity information regarding raw materials for modifying groups.

Acute toxicity:	No data available
Skin corrosion / irritation:	No data available
Eye corrosion / irritation:	No data available
Germ cell mutagenicity:	No data available
Carcinogenicity:	No data available
Reproductive toxicity:	No data available
Specific target organ/systemic toxicity - single exposure:	No data available
Specific target organ/systemic toxicity - repeated exposure:	No data available
Aspiration hazard:	No data available

12. ECOLOGICAL INFORMATION

Possible environmental impact/biotoxicity:	No data available
Persistence/degradability:	No data available
Biological accumulation	No data available
Mobility in soil:	No data available

13. DISPOSAL CONSIDERATIONS

Dispose of used products as infectious medical waste in accordance with relevant laws and regulations.

Dispose of unused items as industrial waste.

14. TRANSPORT INFORMATION

In accordance with the precautions for handling and storage, avoid direct sunlight during transportation, make sure that there are no leaks in the container, load so as not to overturn, drop, or damage, and ensure that the load is prevented from collapsing.

NU No.:	None
Proper shipping name:	None
Hazards Class:	None
Packing group:	None
Marine pollutants:	None

15. JAPANESE REGULATORY INFORMATION

Pharmaceutical Affairs Law:	None
Ordinance of the Ministry of Health and Welfare:	None
Fire Service Act:	None
Occupational Safety and Health Law:	None
Poisonous and Deleterious Substances Control Law:	None
Dangerous Goods Transport and Storage Regulations:	None
PRTR Law :	None

Appendix1 Color of unmodified oligo DNA and modified oligo DNA mixture

Mixture of colorless unmodified oligo DNA, brown FAM-BHQ1 modified oligo DNA, and reddish purple HEX-BHQ1 modified oligo. Color in the mixed state presents a color in which those colored components, brownish and reddish-purple, are mixed.

Appendix 2 Toxicological information of modified oligo modification group raw materials

* The toxicity information in this section is for the modified base material itself, and does not directly apply to modified oligos. Masses described in this section correspond to the masses of the modified base raw materials themselves, not the modified oligo DNA equivalents.

FAM modified raw material:

Acute toxicity:	Peritoneal rat LDLo: 600mg/kg (RTECS)
Intravenous mouse LD50:	300mg/kg (RTECS)
Intravenous rabbit LDLo:	300mg/kg (RTECS)
Skin corrosion/irritation:	No data available
Serious eye damage/irritation:	Eye irritation rabbit 100µL/24H severe (RTECS)
Germ cell mutagenicity:	No data available
Carcinogenicity:	No data available

HEX modified raw material:

Acute toxicity:	No data available
Intravenous mouse LD50:	No data available
Intravenous rabbit LDLo:	No data available
Skin corrosion / irritation:	No data available
Serious eye damage / irritation:	No data available
Germ cell mutagenicity:	No data available
Carcinogenicity:	No data available

BHQ modified raw material

Route of Exposure:	Eye/skin contact, oral intake
Toxicity data available:	None

Contents of this SDS have been prepared based on materials and information available at this time, but the accuracy or safety of the information is not guaranteed.

Precautions in this SDS are intended for normal handling, but in the case of special handling, please implement after taking new safety measures suitable for the intended use.

All chemicals may have unknown hazards and must be handled with great care. It is the user's responsibility to set safe usage conditions.